

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT
DISCHARGE ELIMINATION SYSTEM FOR ALASKAN MECHANICAL
PLACER MINERS

[General Permit No.: AKG-37-0000]

In compliance with the provisions of the Clean Water Act (CWA), 33 U.S.C. § 1251 et seq., as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act",

Owners and operators of facilities engaged in the processing of placer gold are authorized to discharge to waters of the United States, in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein.

**A COPY OF THIS GENERAL PERMIT MUST BE KEPT AT THE SITE
WHERE DISCHARGES OCCUR.**

[Facility Name]

[Receiving Water]

The original version of this permit became effective June 30, 1994. This permit as first modified became effective April 7, 1997. This second modification of the permit shall become effective November 27, 1998.

This permit and the authorization to discharge shall expire on June 30, 1999.

Signed this 20th day of October 1998.

/s/ Phillip G. Millam
Philip G. Millam
Director
Office of Water, Region 10
U.S. Environmental Protection Agency

TABLE OF CONTENTS

Cover Page

I.	COVERAGE UNDER THIS PERMIT	4
A.	Coverage	4
B.	Authorized Placer Mining Operations	5
C.	Additional Requirements	5
D.	Prohibitions	5
E.	Requiring an Individual Permit	6
F.	Notification Requirements	8
G.	Permit Expiration	10
II.	EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS	10
A.	Effluent Limitations	10
B.	Monitoring Requirements	13
III.	MANAGEMENT PRACTICES	15
IV.	MONITORING AND REPORTING REQUIREMENTS	17
A.	Representative Sampling	17
B.	Reporting of Monitoring Results	17
C.	Monitoring Procedures	17
D.	Additional Monitoring by the Permittee	17
E.	Records Contents	18
F.	Retention of Records	18
G.	Notice of Noncompliance Reporting	18
H.	Other Noncompliance Reporting	19
V.	COMPLIANCE RESPONSIBILITIES	19
A.	Duty to Comply	19
B.	Penalties for Violations of Permit Conditions	19
C.	Need to Halt or Reduce Activity not a Defense	20
D.	Duty to Mitigate	20
E.	Proper Operation and Maintenance	20
F.	Removed Substances	20
G.	Bypass of Treatment Facilities	20
H.	Upset Conditions	21
I.	Toxic Pollutants	22
VI.	GENERAL REQUIREMENTS	22
A.	Changes in Discharge of Toxic Substances	22
B.	Planned Changes	23
C.	Anticipated Noncompliance	23
D.	Permit Actions	23
E.	Duty to Reapply	24

F.	Duty to Provide Information	24
G.	Other Information	24
H.	Signatory Requirements	24
I.	Availability of Reports	25
J.	Oil and Hazardous Substance Liability	25
K.	Property Rights	25
L.	Severability	25
M.	State Laws	25
N.	Paperwork Reduction Act	26
O.	Inspection and Entry	26
P.	Transfers	26
VII.	REOPENER CLAUSE	27
VIII.	DEFINITIONS	27
	ATTACHMENT 1	30
	ATTACHMENT 2	31
	ATTACHMENT 3	32
	APPENDIX A	33

I. COVERAGE UNDER THIS PERMIT

A. Coverage

1. Authorization to discharge requires written notification from EPA that coverage has been granted and that a specific permit number has been assigned to the operation.
2. Existing Facilities (those mechanical operations facilities having individual National Pollutant Discharge Elimination System [NPDES] permits or coverage under the existing Alaska placer miner general permit). To gain coverage under this permit, existing facilities which meet the criteria for coverage under Part I of this permit must submit a Notice of Intent (NOI, OMB #2040-0086, expiration date 8/31/98). Such facilities will be granted coverage according to Permit Part F.
3. Pending Applications: Mechanical operations facilities which have submitted applications in accordance with 40 CFR 122.21(a) and which meet the criteria for coverage under this permit will be granted coverage according to Permit Part F.
4. New Facilities: New mechanical operations facilities that are determined to be new sources under the CWA will be required to have an Environmental Assessment (EA) completed pursuant to the National Environmental Policy Act (NEPA). A finding of no significant impact (FNSI) by EPA is necessary prior to receiving coverage under this permit. A FNSI will become effective only after the public has had notice of, and an opportunity to comment on, the FNSI including either the accompanying Environmental Assessment or a summary of it, and the EPA has fully considered all public comments submitted, pursuant to 40 C.F.R. § 6.400(d). If there may be a significant impact, the facility will require an Environmental Impact Statement (EIS). An EIS will be issued only after public notice and an opportunity for public comments on a draft EIS pursuant to 40 C.F.R. § 6.403(a) and § 1503.1(a).
5. Expanding Facilities: Mechanical operations facilities that contemplate expanding shall submit a new NOI that describes the new discharge. The current permit will be terminated and a new permit, reflecting the changes, issued in its place if the facility meets all the necessary requirements of coverage.
6. Coastal Zone Facilities: Mechanical operations facilities located in the coastal zone as determined by the Alaska Coastal Zone Management Act shall submit, with their Notice of Intent (NOI), an individual consistency determination from Alaska Division of Governmental Coordination (ADGC) unless ADGC makes an overall determination on this General Permit after its issuance.

B. Authorized Placer Mining Operations

1. Facilities that mine and process gold placer ores using gravity separation methods to recover the gold metal contained in the ore.
2. Open-cut gold placer mines except those open-cut mines that mine less than 1,500 cubic yards of placer ore per mining season.
3. Mechanical dredge gold placer mines except those dredges that remove less than 50,000 cubic yards of placer ore per mining season or dredge in open waters.

C. Additional Requirements

1. Many streams and stream reaches in Alaska have been designated as part of the federal wild and scenic rivers system or as Conservation System Units (CSUs) by the federal government. Permittees should contact the district offices of the federal agencies that administer the designated area for additional restrictions that may apply to operating within the area. See part I.E.2.
2. Many streams in Alaska where placer mining occurs have been designated by the Alaska Department of Fish and Game (ADF&G) as anadromous fish streams. Placer mining activities in these streams require an ADF&G Fish Habitat Permit which may include additional restrictions. The "Atlas to the Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fish" lists the streams in the State which require prior ADF&G authorization. In addition, placer mining activities in resident fish streams require an ADF&G Fish Habitat Permit if the proposed activity will block or impede the efficient passage of fish. Permittees operating in anadromous or resident fish streams should contact the ADF&G to determine permitting requirements and additional restrictions that may apply.

D. Prohibitions

1. Discharges from the following beneficiation processes are not authorized under this permit: mercury amalgamation, cyanidation, froth floatation, heap and vat leaching.
2. Discharges from hydraulicking, as defined in Part VIII.E, are not authorized under this permit.
3. This general permit does not apply to facilities for which Notices of Intent were approved after August 13, 1996, which are proposed to be located in National Park System Units (i.e., Parks and Preserves), National Monuments, Sanctuaries, Wildlife Refuges, Conservation Areas, Wilderness Areas,

Critical Habitat Areas, or waters within the boundaries of areas designated as wild under the Wild & Scenic Rivers Act.

4. This permit does not apply to wetlands designated in the 1995 Anchorage Wetlands Management Plan.

E. Requiring an Individual Permit

1. The Regional Administrator may require any person authorized by this permit to apply for and obtain an individual NPDES permit when:
 - a. The single discharge or the cumulative number of discharges is/are a significant contributor of pollution;
 - b. The discharger is not in compliance with the terms and conditions of the general permit;
 - c. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
 - d. Effluent limitations guidelines are subsequently promulgated for the point sources covered by the general permit;
 - e. A Water Quality Management plan containing requirements applicable to such point sources is approved;
 - f. An Individual Control Strategy (ICS) is required under Section 304(L) of the Act;
 - g. A Total Maximum Daily Load (TMDL) and corresponding wasteload allocation has been completed for a waterbody or a segment of a waterbody;
 - h. A review of the facility shows that it is subject to the state of Alaska's anti-degradation policy; or
 - i. There are other federal or State legislation, rules or regulations pertaining to a site directly or indirectly related to water quality.
2. The Regional Administrator may deny coverage under this permit in the following circumstances:
 - a. a land management agency with jurisdiction over affected portions of the receiving water, bed, or uplands submits a request that general permit

coverage be denied to EPA within thirty (30) days of the agency's receipt of an NOI; and,

- b. the land management agency's request includes proposed additional or revised permit terms which the requesting agency believes -- based upon evidence attached to or cited in the request -- are necessary to protect the natural values of the affected location; and,
- c. the land management agency's request concerns a person who either;
 - i. seeks to discharge into U.S. waters located in National Recreation Areas, or in State Refuges, Preserves, Sanctuaries, Recreation Areas, Parks, or Critical Habitat Areas; or,
 - ii. is in significant noncompliance with the terms and conditions of the most recent applicable NPDES permit; or,
 - iii. intends to discharge into waters designated as impaired or polluted under the Clean Water Act.

Any person denied coverage under this part must apply for and obtain coverage under either (1) an individual permit, or (2) another applicable watershed-specific general permit. Upon receipt of any such application, EPA will determine whether the permit terms requested by the land management agency should be included in the applicable permit.

- 3. The Regional Administrator will notify the operator in writing by certified mail that a permit application is required. If an operator fails to submit, in a timely manner, an individual NPDES permit application as required, then any applicability of this general permit to the individual NPDES Permittee is automatically terminated at the end of the day specified for application submittal.
- 4. Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application (Form 1 and Form 2C or 2D) with reasons supporting the request to the Regional Administrator .
- 5. When an individual NPDES permit is issued to an owner or operator otherwise covered by this permit, the applicability of this permit to the facility is automatically terminated on the effective date of the individual permit.
- 6. When an individual NPDES permit is denied to an owner or operator otherwise covered by this permit, the Permittee is automatically reinstated under this permit on the date of such denial, unless otherwise specified by

the Regional Administrator. A new facility can receive coverage under this general permit by submitting an NOI. See Permit Part I.A.3. for details.

7. A source excluded from a general permit solely because it already has an individual permit may request that the individual permit be revoked and that it be covered by the general permit. Upon revocation of the individual permit, the general permit shall apply to the source.

F. Notification Requirements

1. Owners or operators of facilities authorized by this permit shall submit an NOI to be covered by this permit. The information required for a complete NOI is in Appendix A of this permit. Notification must be made:
 - a. by January 1 of the year of discharge from a new facility or a facility established since 1988 subject to New Source Performance Standards (NSPS) that has not previously been covered by a permit; or
 - b. 90 days prior to discharge from a new facility not subject to NSPS; or
 - c. 90 days prior to the expiration of an existing individual permit, or
 - d. 90 days prior to discharge for any other facilities.
2. Facilities covered under this permit that discharge to National Park System Units (i.e., Parks and Preserves), National Monuments, Sanctuaries, Wildlife Refuges, Conservation Areas, Wilderness Areas, Critical Habitat Areas, or waters within the boundaries of areas designated as wild under the Wild & Scenic Rivers Act that wish to retain coverage under the general permit until the effective date of a new permit shall submit an application for an individual permit (EPA Application Form 2c) no later than January 1, 1999.
3. An Alaska Placer Mine Application (APMA) will be accepted as an NOI if all the required information from Appendix A, including information to determine site-specific turbidity limits, if applicable, is included.
4. The NOI shall be signed by the owner or other signatory authority in accordance with Permit Part VI.H. (Signatory Requirements), and a copy shall be retained on site in accordance with Permit Part IV.F. (Retention of Records). The address for NOI submission to EPA is:

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue, OW-130
Seattle, Washington 98101

5. A copy of the NOI must also be sent to the Alaska Department of Environmental Conservation (ADEC). The address is:

Alaska Department of Environmental Conservation
610 University Avenue
Fairbanks, Alaska 99709

6. Permittees who do not use the APMA procedure for filing their NOI with Alaska Department of Natural Resources shall send a copy of the NOI to the Federal, State, or local agency that manages or owns the land in which the mine is located or proposed to be located. The addresses are:

Anchorage Area

U.S. Department of Interior
Bureau of Land Management
222 West 7th Avenue, #13
Anchorage, AK 99513-7599

U.S. Department of Interior
National Park Service
605 West 4th Avenue, Suite 104
Anchorage, AK 99501

U.S. Department of Interior
Fish and Wildlife Service
1011 E Tudor Rd
Anchorage, AK 99503

Fairbanks Area

State of Alaska
Department of Fish & Game
1300 College Road
Fairbanks, AK 99701-1599

U.S. Department of Interior
Fish and Wildlife Service
101 12th Avenue, Box 19
Fairbanks, AK 99701

U.S. Department of Interior
Bureau of Land Management
1150 University Avenue
Fairbanks, AK 99709

U.S. Department of Interior
National Park Service
250 Cushman, Suite 1A
Fairbanks, AK 99701

Glennallen Area

U.S. Department of Interior
Bureau of Land Management
P.O. Box 147
Glennallen, AK 99588

U.S. Department of Interior
National Park Service
Wrangell St. Elias
P.O. Box 439
Copper Center, AK 99573

Juneau Area

U.S. Department of Interior
Fish and Wildlife Service
3000 Vintage Blvd, Suite 201
Juneau, AK 99801

U.S. Department of Interior
National Park Service
P.O. Box 21089
Juneau, AK 99802-1089

Nome Area

U.S. Department of Interior
Bureau of Land Management
P.O. Box 925
Nome, AK 99762

U.S. Department of Interior
National Park Service
P.O. Box 220
Nome, AK 99762

Tok Area

U.S. Department of Interior
Bureau of Land Management
P.O. Box 309
Tok, AK 99780

7. A copy of the general permit will be sent to the Permittee when it is determined that the facility can be granted coverage under this general permit. If it is determined that coverage cannot be granted under this permit, the applicant will be informed of this in writing.

G. Permit Expiration

1. This permit will expire on June 30, 1999. Except as provided in paragraph F.2., for facilities submitting a new NOI 90 days prior to expiration of this general permit, the conditions of the expired permit continue in force until the effective date of a new permit.
2. When a permittee has made timely and sufficient application for a permit renewal or new permit in accordance with paragraph 1 of this section, a permit with reference to an activity of a continuing nature does not expire until the application has been finally determined by EPA.

II. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Effluent Limitations

During the term of this permit, no wastewater discharges are authorized except as specified below.

1. Effluent Limitations

- a. The volume of wastewater which may be discharged shall not exceed the volume of infiltration, drainage and mine drainage waters which is in excess of the make-up water required for operation of the beneficiation process.
- b. The wastewater discharged shall not exceed the following:

Effluent Characteristics	Instantaneous Maximum
Settleable Solids	0.2 ml/L
Turbidity	5 NTU above natural background*
Arsenic, Total Recoverable	50 µg/l **
Effluent Flow	[Flow reported in NOI***]
* Subject to Turbidity Mixing Zone outlined in Permit Part II.A.1.c. **See Part II.A.1.e. for details ***See Part II.A.1.d. for details	

- c. Permittees may request a modified turbidity limit based upon a mixing zone approved by the Alaska Department of Environmental Conservation (ADEC) pursuant to 18 AAC 70.032. EPA will approve a modified turbidity limit proposed by ADEC under this General Permit if the modified limit and resulting mixing zone are consistent with the Clean Water Act, EPA's regulations, and 18 AAC 70.032, and provided that:
 - i. the modified turbidity limit does not exceed 1500 NTUs;
 - ii. the modified turbidity limit does not cause turbidity levels to exceed 100 NTUs in at least one-half of the cross-sectional area of resident and anadromous fish migration corridors;
 - iii. the modified turbidity limit is be calculated using (1) the 7-day, 10-year low flow (7Q10) as the chronic criteria design flow for the protection of aquatic life; and (2) zero as the value for upstream turbidity unless site-specific turbidity data are submitted to justify a higher level;
 - iv. the modified turbidity limit does not result in a mixing zone in an area of anadromous fish spawning or resident fish spawning redds for the fish species listed in 18 AAC 70.032(d)(3)(D)(ii) when eggs or alevins are present;
 - v. approved mixing zones do not overlap and the availability and extent of approved mixing zones is limited as necessary to avoid potentially harmful cumulative effects on the receiving environment; and,

- vi. the public was provided reasonable notice of, and an opportunity to comment on, the modified turbidity limit and associated mixing zone, including site-specific assessments used to calculate the limit and zone, prior to their approval by ADEC.
- d. The volume of discharge shall not exceed the volume reported by the permittee on the NOI (Appendix A). If the permittee exceeds that volume, EPA will not consider the permittee in violation of the flow limit if:
 - i. the permittee submits to EPA turbidity samples, flow measurements/seepage estimates for the discharge, and flow measurements for the upstream receiving water taken during the period of the flow exceedence; and,
 - ii. those samples show that the permittee's discharge did not cause the standard of 5 NTU above background to be exceeded at the edge of the mixing zone.

The permittee must report all exceedences of the flow limit, together with any turbidity and flow/seepage data which the permittee intends to use to avoid being considered in violation of the flow limit, pursuant to the reporting requirements in Part IV.G.

e. Arsenic Modifications

- i. Permittees may request a modified arsenic limit reflecting the arsenic concentrations naturally present in the receiving waters as determined by ADEC. EPA will approve a modified arsenic limit proposed by ADEC under this General Permit provided:
 - (a) the modified limit is consistent with the Clean Water Act, EPA's regulations, and state water quality standards regulations;
 - (b) The arsenic concentration naturally present in the receiving waters is determined upstream from any human-caused influence on, discharge to, or addition of material to, the waterbody; and
 - (c) the public was provided reasonable notice of, and an opportunity to comment on, the modified arsenic limit, including all data and other information used to calculate the limit, prior to its approval by ADEC.

Pending decision on the modified arsenic limit, the limit in part II.A.1.b. applies.

- ii. An affected community or individual may request a modified arsenic limit in conjunction with a request that the State evaluate the need for a more stringent site specific criterion.
2. Effluent discharges are prohibited during periods when new water is allowed to enter the plant site. Additionally, there shall be no discharge as a result of the intake of new water.

B. Monitoring Requirements

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the following monitoring shall be conducted:

Effluent Characteristics	Monitoring Location	Monitoring Frequency	Sample Type
Settleable Solids, (ml/L)	Effluent	once per day each day of discharge	Grab
Turbidity (NTU)	Effluent	*	Grab
	Background		
Arsenic, Total Recoverable (µg/L)	Effluent	*	Grab**
Effluent Flow (gpm)	Effluent	***	Instantaneous
* See Part II B.3. & 4. for details. ** Analyzed by EPA Method 206.2 with a detection limit of 1.0 µg/l *** See Part II. B.6. for details.			

2. Inspection Program

The Permittee shall institute a comprehensive inspection program to facilitate proper operation and maintenance of the recycle system and the wastewater treatment system. The Permittee shall conduct a visual inspection of the site once per day, while on site, during the mining season. *The Permittee shall maintain records of all information resulting from any inspections in accordance with part IV.F. of this permit.* These records shall include an evaluation of the condition of all water control devices such as diversion structures and berms and all solids retention structures including, but not limited to, berms, dikes, pond structures, and dams. The records shall also include an assessment of the presence of sediment buildup within the settling ponds. The Permittee shall examine all ponds for the occurrence of short circuiting.

3. Turbidity Monitoring

Permittees shall monitor visually for turbidity at the edge of the mixing zone, or at the point of discharge if no mixing zone is approved by the State, once for each day during which a discharge occurs. The Permittee shall maintain records of all information resulting from this observation in accordance with part IV.F. of this permit.

Permittees that have obtained a site-specific turbidity limit under Permit Part II.A.1.c. shall take at least one turbidity sample per discharge for the first two discharges of the season and one sample for each calendar month in which there is a discharge thereafter.

Those Permittees that do not obtain a site-specific turbidity limit shall take at least one turbidity sample set (*i.e.* the discharge and background samples referenced in Part IV.A.) per discharge for the first two discharges of the season and one sample set for each calendar month in which there is a discharge thereafter.

A Permittee who has had less than two days of discharge over the course of the mining season must submit one sample or sample set for each day of discharge.

All samples must be taken and stored in the manner set forth in Attachment 1.

Discharge and background samples shall be taken within a reasonable time frame. The sample results shall be reported on the annual Discharge Monitoring report (DMR). Monitoring shall be conducted in accordance with accepted analytical procedures. See attachment 1 for sampling protocol.

4. Arsenic Monitoring

Arsenic samples shall be representative of the discharge and shall be taken at a *point prior to entering the receiving stream*. Monitoring shall be conducted in accordance with accepted analytical procedures. The Permittee shall report the sample results on the DMR. (See attachment 2 for sampling protocol.)

The Permittee shall take at least one arsenic sample per discharge for the first three discharges of the season and one sample for each calendar month in which there is a discharge thereafter.

A Permittee who has had less than three days of discharge over the course of the mining season, must submit one sample for each day of discharge.

All samples must be taken and stored in the manner set forth in Attachment 2.

5. Settleable Solids Monitoring

Settleable solids samples shall be representative of the discharge and shall be taken at a point *prior to entering the receiving stream*. Monitoring shall be conducted in accordance with accepted analytical procedures (Standard Methods, 17th Edition, 1989). The Permittee shall report the daily sample results on the annual DMR. See attachment 3 for sampling and analysis protocol.

6. Flow Monitoring

Permittees shall measure the volume of intake water used as make-up water. The intake flow for each day that water is taken in shall be reported on the annual DMR.

Effluent flow shall be measured at the discharge *prior to entering the receiving water*. Effluent flow shall be measured at least once per day each day discharge occurs. The operator must also make a good faith effort to estimate seepage discharging to waters of the United States each day that seepage occurs. Effluent flow and seepage flow shall be reported in gallons per minute (gpm). The flow measurements and seepage estimates, the number of discharge events, and the duration of each discharge event shall be reported in the annual DMR for each day of the mining season.

III. MANAGEMENT PRACTICES

- A. The flow of surface waters (i.e., creek, river, or stream) into the plant site shall be interrupted and these waters diverted around and away to prevent incursion into the plant site.
- B. Berms, including any pond walls, dikes, low dams, and similar water retention structures shall be constructed in a manner such that they are reasonably expected to reject the passage of water.
- C. Measures shall be taken to assure that pollutant materials removed from the process water and wastewater streams will be retained in storage areas and not discharged or released to the waters of the United States.
- D. The amount of new water allowed to enter the plant site for use in material processing shall be limited to the minimum amount required as makeup water.
- E. All water control devices such as diversion structures and berms and all solids retention structures such as berms, dikes, pond structures, and dams

shall be reasonably maintained to continue their effectiveness and to protect from failure.

- F. The operator shall take whatever reasonable steps are appropriate to assure that, after the mining season, all unreclaimed mine areas, including ponds, are in a condition which will not cause degradation to the receiving waters over those resulting from natural causes.
- G. During each mining season, a permittee may not discharge into the receiving stream within three hundred feet of any other upstream or downstream placer mining operation which is discharging or from which it is apparent that a discharge has occurred. Nor may a permittee discharge at a point within three hundred feet of the downstream edge of a mixing zone granted for any other upstream placer mining operation.

H. Other Requirements

The operator shall maintain fuel handling and storage facilities in a manner which will prevent the discharge of fuel oil into the receiving waters or on the adjoining shoreline. A Spill Prevention Control and Countermeasure Plan (SPCC Plan) shall be prepared and updated as necessary in accordance with provisions of 40 CFR Part 112 for facilities storing 660 gallons in a single container above ground, 1320 gallons in the aggregate above ground, or 42,000 gallons below ground.

The Permittee shall indicate on the DMR if an SPCC Plan is necessary and in place at the site and if changes were made to the Plan over the previous year.

I. Storm Exemption

The Permittee may qualify for a storm exemption from the technology-based effluent limitation for flow in Permit Part II.A.1.a. of this NPDES general permit if the following conditions are met:

1. The treatment system is designed, constructed and maintained to contain the maximum volume of untreated process wastewater which would be discharged, stored, contained and used or recycled by the beneficiation process into the treatment system during a 4-hour operating period without an increase in volume from precipitation or infiltration, plus the maximum volume of water runoff (drainage waters) resulting from a 5-year, 6-hour precipitation event. In computing the maximum volume of water which would result from a 5-year, 6-hour precipitation event, the operator must include the volume which should result from the plant site contributing runoff to the individual treatment facility.

2. The operator takes all reasonable steps to maintain treatment of the wastewater and minimize the amount of overflow.
3. The source is in compliance with the Management Practices in Permit Parts III.A. through G.
4. The operator complies with the notification requirements of Permit Parts IV.G. and IV.H.

IV. MONITORING AND REPORTING REQUIREMENTS

A. Representative Sampling. All samples for monitoring purposes shall be representative of the monitored activity, 40 CFR 122.41 (j). To determine compliance with permit effluent limitations, "grab" samples shall be taken as established under Permit Part II.B. Specifically, effluent samples for settleable solids, turbidity, and arsenic shall be collected from the settling pond outlet or other treatment systems' outlet prior to discharge to the receiving stream. Additionally, turbidity background samples shall be taken at a point that is representative of the receiving stream just above the permittee's mining operation. Those who receive a site-specific turbidity limit are not required to take background turbidity samples. Samples for arsenic and turbidity monitoring must be taken during sluicing at a time when the operation has reached equilibrium. For example, samples should be taken when sluice paydirt loading and effluent discharge are constant.

B. Reporting of Monitoring Results. Monitoring results shall be summarized each month and reported on EPA Form 3320-1 (DMR, OMB #2040-0004, expiration date 5/31/98). The DMR shall be submitted to the Environmental Protection Agency, Region 10, 1200 Sixth Avenue, NPDES Compliance Unit OW-133, Seattle, Washington 98101-3188, no later than November 30 each year.

If there is no mining activity during the year or no wastewater discharge to a receiving stream, the Permittee shall notify EPA of these facts no later than November 30 of each year.

The DMR shall also be sent to the ADEC office located in Fairbanks. The address can be found in permit part I.F.4.

C. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

D. Additional Monitoring by the Permittee. If the Permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this

monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated.

E. Records Contents. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The individual(s) who performed the sampling or measurements;
3. The date(s) analyses were performed;
4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used; and
6. The results of such analyses.

F. Retention of Records. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Director or ADEC at any time. Data collected on-site, copies of DMRs, and a copy of this NPDES permit must be maintained on-site during the duration of activity at the permitted location.

G. Notice of Noncompliance Reporting.

1. Any noncompliance which may endanger health or the environment shall be reported as soon as the Permittee becomes aware of the circumstance. A written submission shall also be provided in the shortest reasonable period of time after the Permittee becomes aware of the occurrence.
2. The following occurrences of noncompliance shall also be reported in writing in the shortest reasonable period of time after the Permittee becomes aware of the circumstances:
 - a. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Permit Part V.G., Bypass of Treatment Facilities.); or
 - b. Any upset which exceeds any effluent limitation in the permit (See Permit Part V.H., Upset Conditions.).
 - c. Any violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the Permit to be reported within 24 hours.
3. The written submission shall contain:
 - a. A description of the noncompliance and its cause;

- b. The period of noncompliance, including exact dates and times;
 - c. The estimated time noncompliance is expected to continue if it has not been corrected; and
 - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- 4. The Director may waive the written report on a case-by-case basis if an oral report has been received within 24 hours by the Enforcement Section in Seattle, Washington, by phone, (206) 553-1213.
 - 5. Reports shall be submitted to the addresses in Permit Part IV.B., Reporting of Monitoring Results.

H. Other Noncompliance Reporting. Instances of noncompliance not required to be reported in Permit Part IV.G. above shall be reported at the time that monitoring reports for Permit Part IV.B. are submitted. The reports shall contain the information listed in Permit Part IV.G.3.

V. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply. The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The Permittee shall give advance notice to the Director and ADEC of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

B. Penalties for Violations of Permit Conditions

- 1. Civil and Administrative Penalties. Any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be subject to a civil or administrative penalty, not to exceed the maximum amounts specified in Sections 309(d) and 309(g) of the Act.
- 2. Criminal Penalties:
 - a. Negligent Violations. Any person who negligently violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall, upon conviction, be punished by a fine and/or imprisonment as specified in Section 309(c)(1) of the Act.
 - b. Knowing Violations. Any person who knowingly violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405

of the Act shall, upon conviction, be punished by a fine and/or imprisonment as specified in Section 309(c)(2) of the Act.

- c. **Knowing Endangerment.** Any person who knowingly violates a permit condition implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine and/or imprisonment as specified in Section 309(c)(3) of the Act .
- d. **False Statements.** Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Act or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this Act, shall, upon conviction, be punished by a fine and/or imprisonment as specified in Section 309(c)(4) of the Act.

C. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate. The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

F. Removed Substances. Solids, sludges, or other pollutants removed in the course of treatment or control of wastewater's shall be disposed of in a manner so as to prevent any pollutant from such materials from entering waters of the United States.

G. Bypass of Treatment Facilities.

1. Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this section.
2. Notice:
 - a. Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
 - b. Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required under Permit Part IV.G., Notice of Noncompliance Reporting.
3. Prohibition of bypass.
 - a. Bypass is prohibited and the Director or ADEC may take enforcement action against a Permittee for a bypass, unless:
 - i. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - iii. The Permittee submitted notices as required under paragraph 2 of this section.
 - b. The Director and ADEC may approve an anticipated bypass, after considering its adverse effects, if the Director and ADEC determine that it will meet the three conditions listed above in paragraph 3.a. of this section.

H. Upset Conditions.

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent

limitations if the requirements of paragraph 2 of this section are met. An administrative review of a claim that noncompliance was caused by an upset does not represent final administrative action for any specific event. A determination is not final until formal administrative action is taken for the specific violation(s).

2. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the Permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The Permittee submitted notice of the upset as required under Permit Part IV.G., Notice of Noncompliance Reporting; and
 - d. The Permittee complied with any remedial measures required under Permit Part V.D., Duty to Mitigate.
3. Burden of proof. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.
- I. **Toxic Pollutants.** The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

VI. GENERAL REQUIREMENTS

- A. **Changes in Discharge of Toxic Substances.** Notification shall be provided to the Director and ADEC as soon as the Permittee knows of, or has reason to believe:
 1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. One hundred micrograms per liter (100 $\mu\text{g/l}$);
 - b. Two hundred micrograms per liter (200 $\mu\text{g/l}$) for acrolein and acrylonitrile; five hundred micrograms per liter (500 $\mu\text{g/l}$) for 2,4-dinitrophenol and for

2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

- c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - d. The level established by the Director in accordance with 40 CFR 122.44(f).
2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
- a. Five hundred micrograms per liter (500 μ g/l);
 - b. One milligram per liter (1 mg/l) for antimony;
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - d. The level established by the Director in accordance with 40 CFR 122.44(f).

B. Planned Changes. The Permittee shall give notice to the Director and ADEC as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- 1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29(b); or
- 2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Permit Part VI.A.1.
- 3. The alteration or addition will significantly change the location, nature or volume of discharge or the quantity of pollutants, subject to the effluent limitations, discharged.

C. Anticipated Noncompliance. The Permittee shall also give advance notice to the Director and ADEC of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

- D. Permit Actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- E. Duty to Reapply.** If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit. The NOI should be submitted at least 90 days before the expiration date of this permit.
- F. Duty to Provide Information.** The Permittee shall furnish to the Director and ADEC, within a reasonable time, any information which the Director or ADEC may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director or ADEC, upon request, copies of records required to be kept by this permit.
- G. Other Information.** When the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director or ADEC, it shall promptly submit such facts or information.
- H. Signatory Requirements.** All applications, reports or information submitted to the Director and ADEC shall be signed and certified.
1. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer.
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
 - c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.
 2. All reports required by the permit and other information requested by the Director or ADEC shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Director and ADEC, and
 - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity,

such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

3. Changes to authorization. If an authorization under paragraph IV.H.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph VI.H.2. must be submitted to the Director and ADEC prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- I. **Availability of Reports.** Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Director and ADEC. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.
- J. **Oil and Hazardous Substance Liability.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under Section 311 of the Act.
- K. **Property Rights.** The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
- L. **Severability.** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other

circumstances, and the remainder of this permit, shall not be affected thereby.

M. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.

N. Paperwork Reduction Act. EPA has reviewed the requirements imposed on regulated facilities in this draft general permit under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq. The information collection requirements of this permit have already been approved by the Office of Management and Budget in submission made for the NPDES permit program under the provisions of the CWA.

O. Inspection and Entry. The Permittee shall allow the Director, ADEC, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

P. Transfers. This permit may be automatically transferred to a new permittee if:

1. The current permittee notifies the Director at least 30 days in advance of the proposed transfer date;
2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.

VII. REOPENER CLAUSE

If EPA-approved revisions to Alaska's water quality standards are made, this permit may be reopened to include limits or requirements based on the revised standards.

VIII. DEFINITIONS

- A. "Bypass" means the intentional diversion of waste streams around any portion of a treatment facility.
- B. "Drainage Water" means incidental surface waters from diverse sources such as rainfall, snow melt or permafrost melt.
- C. "Expanding Facility" means any facility increasing in size such as to affect the discharge but operating within the permit area covered by its general permit.
- D. A "Grab" sample is a single sample or measurement taken at a specific time.
- E. "Hydraulicking" means both the hydraulic removal of overburden and the use of hydraulic power to move raw rock to the point of processing (i.e. to the gate of the sluice or other processing equipment).
- F. "Infiltration Water" means that water which permeates through the earth into the plant site.
- G. "Instantaneous Maximum" means the maximum value measured at any time.
- H. "Mine Drainage" means any water, not associated with active sluice water, that is drained, pumped or siphoned from a mine.
- I. "Mining Season" means the time between the start of mining in a calendar year and when mining has ceased for that same calendar year."
- J. "Monitoring Month" means the period consisting of the calendar weeks which begin and end in a given calendar month.
- K. "New Facility" means a facility that has not operated in the area specified in the NOI prior to the submission of the NOI.
- L. "NTU" (Nephelometric Turbidity Unit) is an expression of the optical property that causes light to be scattered and absorbed rather than transmitted in a straight line through the water.

- M. "Make-up Water" means that volume of water needed to replace process water lost due to evaporation and seepage in order to maintain the quantity necessary for the operation of the beneficiation process.
- N. "New Water" means water from any discrete source such as a river, creek, lake or well which is deliberately allowed or brought into the plant site.
- O. "Plant Site" means the area occupied by the mine, necessary haulage ways from the mine to the beneficiation process, the beneficiation area, the area occupied by the wastewater treatment storage facilities and the storage areas for waste materials and solids removed from the wastewaters during treatment.
- P. "Receiving Water" means waters such as lakes, rivers, streams, creeks, or any other surface waters which receive wastewater discharges.
- Q. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- R. "Short circuiting" means ineffective settling ponds due to inadequate or insufficient retention characteristics, excessive sediment deposition, embankment infiltration/percolation, lack of maintenance, etc.
- S. "Silt and Clay" are soil particles having a diameter of less than 0.002 mm (2 microns).
- T. "Turbidity Modification" means the procedures used to calculate a higher turbidity limit based on a mass balance equation which relates upstream receiving water flow and turbidity to effluent flow and turbidity. The basic form of this equation is:

$$Q_1C_1 + Q_2C_2 = Q_3C_3,$$

where C_1 = effluent turbidity;

C_2 = natural background turbidity (zero, unless data are submitted to justify a higher value)

C_3 = receiving water downstream turbidity after mixing where the allowable increase is 5 NTU above background (i.e. 5 NTU);

Q_1 = effluent flow

Q_2 = receiving water flow upstream from the discharge (i.e., 7Q10)

Q_3 = total receiving water flow downstream from discharge after complete mixing ($Q_1 + Q_2$).

- U. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- V. "Wastewater" means all water used in and resulting from the beneficiation process (including but not limited to the water used to move the ore to and through the beneficiation process, the water used to aid in classification, and the water used in gravity separation), mine drainage, and infiltration and drainage waters which commingle with mine drainage or waters resulting from the beneficiation process.

ATTACHMENT 1

Turbidity Sampling Protocol

1. Grab samples shall be collected.
2. Samples shall be collected in a sterile one liter polypropylene or glass container.
3. Samples must be cooled to 4 degrees Celsius (iced).
4. Samples must be analyzed within 48 hours of sample collection.

ATTACHMENT 2

Arsenic Sampling Protocol

1. Grab samples shall be collected.
2. Samples shall be collected in a sterile one liter polypropylene or glass container.
3. Samples must be cooled to 4 degrees Celsius (iced).
4. Samples must be acidified promptly with nitric acid (HNO₃), to a pH less than 2.*
5. Samples must be sent to a laboratory for analysis within 60 days.
6. Samples must be acidified for at least 16 hours prior to analysis.

* Samples that are not acidified promptly must be sent to a laboratory within 48 hours of sample collection.

ATTACHMENT 3

Settleable Solids Sampling Protocol

1. Grab samples shall be collected.
2. Samples shall be collected in a sterile one liter polypropylene or glass container.
3. Samples must be cooled to 4 degrees Celsius (iced), if analysis is not performed immediately.
4. Samples must be analyzed within 48 hours of sample collection.

Settleable Solids Analysis Protocol

1. Fill an Imhoff cone to the liter mark with a thoroughly mixed sample.
2. Settle for 45 minutes, then gently stir the sides of the cone with a rod or by gently spinning the cone.
3. Settle 15 minutes longer, then record the volume of settleable matter in the cone as milliliters per liter. Do not estimate any floating material. The lowest measurable level on the Imhoff cone is 0.1 ml/l. Any settleable material below the 0.1 ml/l mark shall be recorded as trace.

**APPENDIX A
NOTICE OF INTENT INFORMATION**

PERMITTEE NAME			PREVIOUS NPDES PERMIT NUMBER
ADDRESS	<u>SUMMER</u>	<u>WINTER</u>	WATER THAT THE FACILITY DIRECTLY DISCHARGES TO:
PHONE NUMBER			
OPERATOR NAME			PLEASE PROVIDE A DRAWING OF YOUR OPERATION ON THE BACK OF THE NOI SHEET THAT IS SUBMITTED
ADDRESS	<u>SUMMER</u>	<u>WINTER</u>	
PHONE NUMBER			
FACILITY NAME			LATITUDE
NEAREST TOWN			LONGITUDE
MINING DISTRICT		QUAD MAP, TOWNSHIP, RANGE, SECTION	
TURBIDITY INFORMATION			
MAXIMUM EFFLUENT FLOW		LOWFLOW STREAM FLOWS ♦	
♦ Obtained from Alaska Department of Natural Resources, Division of Mining			
TYPE OF OPERATION	TRADITIONAL	SUCTION DREDGE	HYDRAULICKING
AMOUNT OF MATERIAL PROCESSED			
SIGNATURE			DATE:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.